Performance Data Sheet

AVA5538WXN

General Information

Model	AVA5538WXN	**Refrigerant**	R-407C/R-22
Test Condition	ARI (R407C)	**Performance Test Voltage**	230V ~ 60HZ
Return Gas	18.3°C (65°F) RETURN GAS	**Motor Type**	PSC

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
-15	Btu/h	12000	9940					
	Watts	1110	1180					
	Amps	5.05	5.39					
	Lb/h							
-10	Btu/h	12500	10600	8640				
	Watts	1260	1350	1370				
	Amps	5.87	6.18	6.53				
	Lb/h							
-5	Btu/h	13400	11700	9840	7960			
	Watts	1400	1520	1560	1550			
	Amps	6.66	6.96	7.29	7.60			
	Lb/h	27.8	35.1	44.1	52.8			
0	Btu/h	14800	13200	11400	9600	7740		
	Watts	1540	1680	1750	1760	1730		
	Amps	7.40	7.72	8.06	8.36	8.59		
	Lb/h	100	99.2	100	102	101		
5	Btu/h	16700	15100	13400	11600	9700		
	Watts	1670	1830	1930	1970	1960		
	Amps	8.09	8.45	8.82	9.14	9.38		
	Lb/h	166	158	153	148	140		
10	Btu/h	19000	17400	15700	13900	11900	9980	7970
	Watts	1790	1980	2100	2170	2190	2170	2120
	Amps	8.70	9.13	9.55	9.92	10.2	10.3	10.3
	Lb/h	227	214	202	192	180	164	142
15	Btu/h	21700	20100	18300	16500	14500	12400	10300
	Watts	1890	2110	2260	2360	2410	2420	2400
	Amps	9.22	9.75	10.3	10.7	11.0	11.2	11.2
	Lb/h	284	265	250	235	219	199	174
20	Btu/h	24900	23200	21400	19400	17200	15000	12700
	Watts	1980	2230	2410	2540	2620	2650	2660
	Amps	9.64	10.3	10.9	11.4	11.8	12.1	12.1
	Lb/h	337	315	296	278	259	237	209

25	Btu/h	28500	26700	24700	22600	20300	17800	15300
	Watts	2050	2330	2540	2700	2810	2880	2920
	Amps	9.94	10.7	11.5	12.1	12.6	13.0	13.1
	Lb/h	387	363	342	322	301	277	248
30	Btu/h	32500	30500	28400	26000	23500	20900	18100
	Watts	2090	2410	2660	2850	2990	3090	3170
	Amps	10.1	11.1	12.0	12.8	13.4	13.9	14.1
	Lb/h	436	411	388	367	346	322	293
35	Btu/h	36900	34800	32400	29800	27000	24100	21000
	Watts	2110	2470	2750	2980	3150	3290	3400
	Amps	10.1	11.3	12.4	13.4	14.2	14.8	15.1
	Lb/h	484	458	436	415	394	371	343
40	Btu/h	41700	39300	36700	33800	30700	27500	24100
	Watts	2110	2500	2820	3080	3300	3470	3610
	Amps	10.0	11.4	12.7	13.9	14.9	15.6	16.1
	Lb/h	532	507	486	467	448	426	400
45	Btu/h	46900	44200	41200	38100	34700	31100	27300
	Watts	2070	2500	2860	3160	3410	3630	3810
	Amps	9.71	11.4	12.9	14.3	15.5	16.4	17.1
	Lb/h	581	558	539	523	506	487	465
50	Btu/h	52400	49400	46100	42600	38800	34800	30600
	Watts	2010	2470	2880	3220	3510	3760	3980
	Amps	9.22	11.1	12.9	14.6	16.0	17.2	18.1
	Lb/h	632	612	597	584	571	556	538
55	Btu/h	58300	54900	51300	47300	43100	38700	34000
	Watts	1910	2420	2860	3240	3570	3870	4130
	Amps	8.53	10.7	12.8	14.7	16.4	17.9	19.0
	Lb/h	686	670	659	651	643	633	620

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.176587E+04	-3.039180E+03	1.044707E+01	4.256391E+02
C2	7.156474E+01	-1.513600E+01	-1.572642E-03	2.749298E+01
C3	1.129451E+01	1.072127E+02	-1.517345E-01	-1.007415E+01
C4	1.587589E+01	-4.392883E-01	-5.285512E-03	-3.008894E-01
C5	4.704575E+00	5.437880E-01	2.860122E-03	-1.899464E-01
C6	-1.547328E+00	-7.486317E-01	1.991497E-03	1.024099E-01
C7	-1.301428E-02	-3.374795E-03	-1.886498E-05	1.174246E-03
C8	-8.403812E-02	3.212512E-03	5.113773E-05	2.235872E-03
C9	-1.888984E-02	-2.388629E-04	-1.312235E-05	2.359192E-04
C10	3.991555E-03	1.553651E-03	-7.131310E-06	-3.418920E-04

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

Tc = Condensing Temperature

Performance Data Sheet

AVA5538WXN

General Information

Model	AVA5538WXN	**Refrigerant**	R-407C/R-22
Test Condition	ASHRAE (R22)	**Performance Test Voltage**	230V ~ 60HZ
Return Gas	-6.7°C (20°F) SUPERHEAT	**Motor Type**	PSC

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
-15	Btu/h	12300	11000					
	Watts	1430	1470					
	Amps	7.10	6.89					
	Lb/h	159	147					
-10	Btu/h	13500	12100	10600				
	Watts	1590	1660	1670				
	Amps	7.78	7.75	7.59				
	Lb/h	173	161	146				
-5	Btu/h	15100	13600	12100	10400			
	Watts	1730	1820	1860	1850			
	Amps	8.37	8.52	8.52	8.39			
	Lb/h	193	180	166	148			
0	Btu/h	17300	15700	14000	12200	10200		
	Watts	1850	1970	2040	2060	2030		
	Amps	8.86	9.19	9.36	9.38	9.26		
	Lb/h	218	206	191	174	153		
5	Btu/h	19900	18100	16300	14400	12400		
	Watts	1960	2100	2200	2250	2250		
	Amps	9.26	9.77	10.1	10.3	10.3		
	Lb/h	250	237	222	204	184		
10	Btu/h	23000	21100	19100	17000	14800	12600	10200
	Watts	2050	2220	2350	2430	2460	2450	2400
	Amps	9.57	10.3	10.8	11.1	11.3	11.3	11.1
	Lb/h	287	273	258	240	219	195	167
15	Btu/h	26600	24400	22200	20000	17700	15300	12800
	Watts	2130	2330	2480	2590	2660	2680	2670
	Amps	9.80	10.7	11.4	11.9	12.2	12.3	12.3
	Lb/h	330	315	298	280	259	235	207
20	Btu/h	30600	28200	25800	23400	20800	18300	15600
	Watts	2190	2410	2590	2740	2840	2900	2920
	Amps	9.95	11.0	11.9	12.5	13.0	13.3	13.4
	Lb/h	378	361	344	325	303	279	251

25	Btu/h	35200	32500	29800	27100	24400	21600	18800
	Watts	2240	2480	2700	2870	3000	3100	3160
	Amps	10.0	11.3	12.3	13.2	13.8	14.2	14.4
	Lb/h	431	413	394	374	352	327	298
30	Btu/h	40100	37100	34200	31200	28200	25200	22200
	Watts	2260	2540	2780	2990	3150	3280	3380
	Amps	10.0	11.5	12.7	13.7	14.5	15.0	15.4
	Lb/h	488	469	449	428	404	378	349
35	Btu/h	45500	42200	38900	35600	32400	29100	25800
	Watts	2280	2580	2850	3090	3290	3460	3590
	Amps	9.99	11.6	13.0	14.2	15.1	15.8	16.3
	Lb/h	551	530	508	485	461	434	404
40	Btu/h	51300	47700	44000	40400	36900	33300	29700
	Watts	2280	2610	2910	3180	3410	3620	3790
	Amps	9.87	11.7	13.3	14.6	15.7	16.5	17.1
	Lb/h	618	595	571	547	521	492	462
45	Btu/h	57600	53500	49500	45600	41600	37800	33900
	Watts	2260	2620	2950	3250	3520	3760	3970
	Amps	9.69	11.7	13.5	15.0	16.2	17.2	17.9
	Lb/h	690	664	639	612	584	555	523
50	Btu/h	64200	59700	55300	51000	46700	42500	38300
	Watts	2230	2620	2980	3310	3620	3890	4140
	Amps	9.46	11.7	13.6	15.3	16.7	17.8	18.7
	Lb/h	766	738	710	681	651	620	586
55	Btu/h	71300	66300	61500	56700	52100	47400	42900
	Watts	2180	2600	2990	3360	3700	4010	4300
	Amps	9.19	11.6	13.7	15.6	17.1	18.4	19.4
	Lb/h	846	815	784	753	721	688	653

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.818792E+04	-8.303972E+02	3.180243E-02	3.124246E+02
C2	8.289057E+02	-4.142778E+00	-2.877402E-01	8.041701E+00
C3	-1.310097E+02	5.320070E+01	1.844327E-01	-1.786539E+00
C4	1.453640E+01	-3.675603E-01	-2.032245E-03	1.517141E-01
C5	-5.774675E+00	1.853044E-01	5.662521E-03	-4.658204E-02
C6	9.585774E-02	-2.473989E-01	-9.866599E-04	1.529151E-02
C7	-1.229539E-02	1.420717E-04	5.546002E-06	-2.230888E-04
C8	-5.863620E-02	5.936698E-04	2.767467E-06	-4.534987E-04
C9	1.729432E-02	1.949642E-03	-1.194686E-05	2.227216E-04
C10	-2.083615E-03	2.281195E-05	7.537655E-07	-9.569456E-05

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

Tc = Condensing Temperature